U.S. Application No.: 10/544,093

International Application No.: PCT/US04/02856 Preliminary Amendment filed March 3, 2006

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

## **Listing of Claims:**

1. (Original) A method of prophylaxis of a disease associated with amyloid deposits of A $\beta$  in the brain of a patient, comprising administering an effective regime of a fragment of A $\beta$ , wherein the fragment induces antibodies that specifically bind to A $\beta$  at one or more epitopes between residues 12 and 43 without inducing antibodies that specifically bind to one or more epitopes between residues 1-11, and the fragment is not A $\beta$ 13-28, 17-28, 25-35, 35-40, 33-42 or 35-42, whereby the induced antibodies specifically bind to soluble A $\beta$  in the patient thereby inhibiting formation of amyloid deposits of A $\beta$  in the brain from the soluble A $\beta$ , and thereby effecting prophylaxis of the disease

## 2-5. (Canceled)

- 6. (Original) The method of claim 1, wherein the fragment is selected from the group consisting of A $\beta$ 15-21, A $\beta$ 16-22, A $\beta$ 17-23, A $\beta$ 18-24, A $\beta$ 19-25, A $\beta$ 15-22, A $\beta$ 16-23, A $\beta$ 17-24, A $\beta$ 18-25, A $\beta$ 15-23, A $\beta$ 16-24, A $\beta$ 17-25, A $\beta$ 18-26, A $\beta$ 15-24, A $\beta$ 16-25, and A $\beta$ 15-25.
  - 7. (Canceled)
- 8. (Original) A method of prophylaxis of a disease associated with amyloid deposits of Aβ in the brain of a patient, comprising administering an effective regime of a fragment of Aβ, wherein the fragment is selected from the group consisting of Aβ15-21, Aβ16-22, Aβ17-23, Aβ18-24, Aβ19-25, Aβ15-22, Aβ16-23, Aβ17-24, Aβ18-25, Aβ15-23, Aβ16-24, Aβ17-25, Aβ18-26, Aβ15-24, Aβ16-25, and Aβ15-25, and thereby effect prophylaxis of the disease.

9-25. (Canceled)

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- 26. (Currently Amended) The method of any of the preceding claims claims 1 or 8, wherein the fragment is administered with an adjuvant that increases the level of antibodies induced by the fragment.
  - 27. (Canceled)
- 28. (Currently Amended) The method of any of the preceding claims claims 1 or 8, wherein the fragment is administered by administering a polynucleotide encoding the fragment, wherein the polynucleotide is expressed to produce the fragment in the patient.
  - 29-31. (Canceled)
- 32. (Original) The method of claim 1, wherein the fragment is linked to a carrier molecule to form a conjugate.
  - 33-47. (Canceled)
- 48. (Original) A method of treating a disease associated with amyloid deposits of  $A\beta$  in the brain of a patient, comprising administering an effective regime of a fragment of  $A\beta$ , wherein the fragment induces antibodies that specifically bind to  $A\beta$  at one or more epitopes between residues 12 and 43 without inducing antibodies that specifically bind to one or more epitopes between residues 1-11, and the fragment , 33-42  $A\beta$ 13-28, 17-28, 25-35, 35-40 or 35-42, whereby the induced antibodies specifically bind to soluble  $A\beta$  in the patient thereby inhibiting formation of amyloid deposits of  $A\beta$  in the brain from the soluble  $A\beta$ , and thereby treat the disease.
  - 49-52. (Canceled)
- 53. (Original) The method of claim 48, wherein the fragment is selected from the group consisting of Aβ15-21, Aβ16-22, Aβ17-23, Aβ18-24, Aβ19-25, Aβ15-22, Aβ16-23, Aβ17-24, Aβ18-25, Aβ15-23, Aβ16-24, Aβ17-25, Aβ18-26, Aβ15-24, Aβ16-25, and Aβ15-25.

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- 54. (Canceled)
- 55. (Original) A method of treating a disease associated with amyloid deposits of Aβ in the brain of a patient, comprising administering an effective regime of a fragment of Aβ, wherein the fragment is selected from the group consisting of Aβ15-21, Aβ16-22, Aβ17-23, Aβ18-24, Aβ19-25, Aβ15-22, Aβ16-23, Aβ17-24, Aβ18-25, Aβ18-26, Aβ15-24, Aβ16-25, and Aβ15-25, and thereby treat the disease.

56-72. (Canceled)

- 73. (Currently Amended) The method of any of the preceding claims claims 48 or 55, wherein the fragment is administered with an adjuvant that increases the level of antibodies induced by the fragment.
  - 74. (Canceled)
- 75. (Currently Amended) The method of any of the preceding claims claims 48 or 55, wherein the fragment is administered by administering a polynucleotide encoding the fragment, wherein the polynucleotide is expressed to produce the fragment in the patient.

76-78. (Canceled)

79. (Original) The method of claim 55, wherein the fragment is linked to a carrier to form a conjugate.

80-94. (Canceled)

95. (Original) A pharmaceutical composition comprising a fragment of  $A\beta$  as defined in any of claims 48-55 and an adjuvant.

96-102. (Canceled)